



Sawsan As-Sanie, MD, MPH
Assistant Profosseor
Fellowship Director



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Assistant Professor

Department of Obstetrics and Gynecology
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Accredited: 3 years
2nd Site Visit Scheduled: June 2010

Faculty: Sawsan As-Sanie, MD, MPH and Arleen Song, MD, MPH

2-Year Program

Description:

The comprehensive goal of the University of Michigan Minimally Invasive Surgery fellowship program is to train academic fellows who are outstanding clinicians, teachers, and research contributors. The clinical educational objective of the two year training program is to provide fellows with the necessary knowledge, skills and experience to independently manage complex gynecologic patients that may benefit from advanced endoscopic procedures. Specific educational goals for each fellow include development of the following:

1. Sufficient understanding, experience, and proficiency to perform advanced endoscopic, hysteroscopic, abdominal and vaginal sugery for complex, benign gynecologic conditions. These conditions include uterine fibroids, advanced endometriosis, benign ovarian neoplasms, ovarian remnants, and chronic pelvic pain.
2. To evaluate and appropriately select the appropriate medical and/or surgical treatment plan for women presenting with complex, benign gynecologic conditions such as abnormal uterine bleeding, symptomatic uterine fibroids, chronic pelvic pain, and/or endometriosis.

In addition, each fellow will be provided resources and experience to develop academic skills. Specific objectives for the teaching and research curriculum include the following:

1. Ability to use appropriate methods and educational aids to teach medical students, residents, and allied health care professionals in clinical or classroom environments.
2. Sufficient understanding and proficiency to complete clinical and/or health-services research projects, in addition to development of collaborative skills with others that foster ongoing research activities.
3. Ability to write scientific articles, and grant applications and to contribute in an academic setting.

Faculty

The fellowship training program is under the direction of Sawsan (Suzie) As-Sanie, MD, who joined the faculty at the University of Michigan in August 2005. Dr. As-Sanie is an Assistant Professor and became the Director of the Minimally Invasive Surgery Fellowship program in July 2009. She is also the director of the Chronic Pelvic Pain Program and the University of Michigan Endometriosis Center. Dr. As-Sanie received her medical degree from the Johns Hopkins School of Medicine and completed her residency in obstetrics and gynecology at MetroHealth Medical Center and the Cleveland Clinic Foundation. Following residency, she completed a three year clinical and research fellowship in Advanced Laparoscopy and Chronic Pelvic Pain at the University of North Carolina, under the mentorship of Dr. John Steege. During this time, she also received her MPH in epidemiology. In addition to her busy clinical practice in minimally invasive gynecology, endometriosis and chronic pelvic pain, Dr. As-Sanie maintains an active clinical research program. Her research interests are aimed at defining the underlying neurobiological mechanism of chronic pelvic pain disorders, with a focus on endometriosis-associated pelvic pain.

Dr. Arleen Song is director of the Clinical Services for Division of Minimally Invasive Surgery and also plays an integral role in the training of fellows in Minimally Invasive Surgery. Dr. Song received her medical degree from the University of North Carolina and her MPH from The University of Michigan. In July 2003, Arleen Song, MD, MPH completed her residency in obstetrics and gynecology at the University of Michigan and remained at the University for her two year fellowship in Minimally Invasive Surgery and Chronic Pelvic Pain under the mentorship of Dr. Arnold Advincula. Dr. Song was appointed Assistant Professor in 2006 and has been the Director of Hysteroscopic Surgery and Office-based Surgery since July 2005. She was further appointed as Director of Clinical Services in Minimally Invasive Surgery in October 2009.

Fellowship Overview

The University of Michigan Fellowship in Minimally Invasive Surgery was established in 2003, and was first accredited by the AAGL/SRS in 2005. Fellows actively participate in all aspects of in-patient and out-patient care of patients seen by the MIS faculty. This includes the evaluation, planning, treatment and follow-up of patients seen in the Minimally Invasive Surgery Referral Clinic, the University of Michigan Endometriosis Center, and the Pelvic Pain Consultative Clinic. Through this experience, fellows will become proficient in the minimally invasive approach to common gynecologic complaints such as abnormal uterine bleeding, uterine fibroids, and adnexal masses. Fellows will also gain valuable and extensive experience in the multi-system and multidisciplinary approach to the evaluation of chronic pelvic pain and endometriosis. Fellows will spend approximately 1-2 days in clinic, depending on their rotation schedule.

The surgical experience during this fellowship is “*hands-on*”, and fellows actively participate in all surgical cases performed by the MIS faculty. Types of procedures that a fellow is expected to master include the following: supracervical and total laparoscopic hysterectomy, robot-assisted hysterectomy, robotic myomectomy, laparoscopic excision of advanced endometriosis, laparoscopic ovarian cystectomy and adnexectomy, laparoscopic and robotic trachelectomy, lysis of adhesions, excision of ovarian remnants, and advanced operative hysteroscopy with resection of submucosal fibroids, uterine septum, and intrauterine adhesions. Minilaparotomy for abdominal myomectomy and hysterectomy, as well as vaginal hysterectomy are also emphasized. Fellows will spend approximately 2-2 ½ days in the operating room, depending on their rotation schedule. The MIS faculty also lead an outpatient office procedure clinic, with a focus on office hysteroscopy, office endometrial ablation, and saline-sonography. This clinic is held weekly.

In addition to time spent in the operating room, fellows will further refine their skills in surgical simulation labs and cadaver labs done jointly with GYN oncology and urogynecology.

Off-Service Rotations and Electives

All MIS fellows at the University of Michigan will have the opportunity to spend one month per year on the urogynecology service and the gynecologic oncology service at The University of Michigan. The MIS fellow will be fully integrated into these off-service rotations. During these rotations, the MIS fellow will have the opportunity to participate in the medical and surgical care of patients on these services. In doing so, MIS fellows will gain important exposure and experience in the preoperative evaluation of urinary and fecal incontinence,

urogenital prolapse, as well as the screening and evaluation of gynecologic malignancies. The fellows will also operate with each service, and will gain valuable experience in prolapse and incontinence procedures, as well as radical pelvic surgery including laparoscopic and robotic GYN cancer staging procedures.

Educational Objectives:

Over the course of the fellowship, all fellows will participate in semi-weekly didactic sessions. Reading material on a clinical topic is assigned to the fellows and is discussed by one of the attending faculty. Particular attention will be given to areas of controversy and new research. Topics to be discussed will be as follows and will utilize the most recent literature and/or text books:

1. Laparoscopy equipment and instrumentation, with an emphasis on electrosurgery.
2. Laparoscopic pelvic anatomy
3. Selection and counseling of patients for endoscopic surgery
4. Patient positioning and trocar placement
5. Operative hysteroscopy: patient selection, instrumentation, and surgical approach
6. Acute intraoperative and postoperative complications of laparoscopy
7. Acute intraoperative and postoperative complications of hysteroscopy
8. Adhesion prevention and management
9. Laparoscopic approach to hysterectomy
10. Laparoscopic myomectomy
11. The role of cystoscopy and evaluation of urinary tract injuries in gynecologic surgery
12. The evaluation and management of the patient with an adnexal mass
13. Overview of the evaluation of the patient with chronic pelvic pain
14. Role of the central nervous system in chronic pelvic pain
15. Pathophysiology and immunology of endometriosis
16. Medical management of endometriosis-associated chronic pelvic pain
17. Surgical management of endometriosis
18. Musculoskeletal causes of chronic pelvic pain
19. Evaluation and management of interstitial cystitis
20. Evaluation and management of irritable bowel syndrome
21. Overview of the pathophysiology, evaluation and treatment of vulvodynia
22. Hormone replacement therapy and menopause
23. Evaluation and management of abnormal uterine bleeding
24. Medical and surgical treatment options for symptomatic uterine fibroids

Conference Schedule

	Time	Conference
Monday	0645	Gyn Preop Conference (GYN residents)
	1700	Ob-Gyn Department M&M
Tuesday	1200	MIS Preop Conference (MIS fellow & MIS resident)
Thursday	0730	Grand Rounds
Friday	Flex time	MIS Didactics (2 nd & 4 th week of each month)
	Flex time	MIS research meeting (1 st & 3 rd week of each month)

DESCRIPTION OF CONFERENCES:

Gyn Preop Conference: The gynecology service meets on a weekly basis to discuss the planned surgical procedures for the week. The preoperative evaluation and the indications for all resident patients and all hysterectomies are reviewed. This conference provides the residents and fellows to review the appropriate preoperative evaluation of most gynecologic surgical procedures, to discuss alternative treatment options, and the appropriate informed consent process. This conference is lead by the chief resident on the Benign GYN Service, and is supervised by the GYN Division Director, Dr. Dee Fenner.

Ob-GYN Department M&M Conference: This department-wide morbidity and mortality conference is presented by the senior resident on each service: Obstetrics, Benign Gynecology (including Urogynecology), GYN Oncology, and Reproductive Endocrinology and Infertility.

MIS Preop Conference: The MIS division will meet weekly to review the planned surgical procedures for the following week. This is used as an opportunity to review the appropriate preoperative evaluation of minimally invasive surgery procedures, review MRI and other imaging results, and any issues related to planning the surgical procedure.

MIS Didactics: The MIS division will meet 2 times per month for a didactic session to review topics of particular interest to our division. One session each month will be dedicated to review of a clinical topic outlined in the fellowship educational objectives. One session each month will be dedicated to discussing ongoing or planned research studies, presentations, and manuscripts. MIS/PPP faculty and fellows will participate in presenting these didactic sessions.

Ob-GYN Department Grand Rounds: This department-wide Grand Rounds is an excellent source of continuing medical education, covering a wide variety of topics relevant to obstetricians and gynecologists.

Teaching by Fellows

The University of Michigan is recognized as one of the premier residency programs in obstetrics and gynecology in the United States and MIS fellows play an integral role in the education of residents and medical students within the department. Two or three residents at different levels of training, and one or more medical students are assigned to the division for each rotation. Residents and medical students function as important members of the health care team under the direction of the MIS fellows. In addition to teaching on daily work rounds and in the operating room, fellows are asked to prepare and deliver formal lectures and seminars for the resident core curriculum and to lead discussion at department journal clubs.

Clinical Research

There is a core of knowledge and skills common to all areas of clinical research that should form the foundation of the well-trained, independent clinical researcher. There are numerous opportunities to receive formal training and mentorship in clinical research. Clinical research activities include institutional studies and NIH-funded projects. An important ancillary goal of the two years of clinical training is to provide a framework in which the fellow can learn to balance the demands of clinical care with those of scholarly pursuits, including ongoing clinical research and manuscript preparation.

Clinical fellows within the department of Obstetrics and Gynecology have the opportunity to pursue a masters program in public health (MPH) or a Masters in Clinical Research and Statistical Analysis (<http://www.michr.umich.edu/K30/index.html>). Additional master's opportunities are available, and may be more appropriate depending on the fellow's particular interest.

Within the department of Obstetrics and Gynecology, the Fellowship Advisory Committee has also developed a biannual **Common Fellowship Curriculum**. These are ½ day seminars that provide all obgyn fellows educational seminars in numerous topics relevant to clinical research and academic leadership. Topics include research design and implementation, identifying funding opportunities, manuscript timelines and preparation, how to be an effective teacher, and employment contracts.

Research Opportunities within the Minimally Invasive Surgery Program:

- Quality of life and fertility outcomes following laparoscopic and robotic surgery
- The role of the central nervous system in endometriosis-associated chronic pelvic pain
- Neurobiological predictors of persistent pelvic pain in women undergoing hysterectomy for chronic pelvic pain
- Surgical simulation and methods of teaching laparoscopy in gynecologic surgery

Under the supervision of Dr. As-Sanie, fellows will be expected to complete 2 independent research projects in collaboration with the MIS faculty and/or faculty within the University of Michigan. These projects should result in presentation at a national meeting and publication in a peer-reviewed journal. Research time will be allocated on a weekly basis according to the service month, and semi-weekly MIS division research meetings will serve as the forum to discuss and review the progress of faculty and fellow projects.